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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/520,787	01/11/2005	Kenichi Miyoshi	L9289.04193	2438

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EXAMINER	
MIAH, LITON	

ART UNIT	PAPER NUMBER
2617	

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10/05/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/520,787	MIYOSHI ET AL.	
	Examiner	Art Unit	
	Liton Miah	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 January 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 1/11/05 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *01/10/2006, 01/11/2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 2 and 6 are objected under 37 C.F.R. 1.75 because of the following informalities:

In claim 2 line 7, "a packet" seems to refer back to "a new packet" recited at line 13 of claim 1. If this is true, it is suggested to change "a packet" to "the packet". Appropriate correction is required.

In claim 6 line 11, "a packet transmission" seems to refer back to "packet transmission" recited at line 6. If this is true, it is suggested to change "a packet transmission" to "the packet transmission".

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 5 is rejected under 35 U.S.C. 102(b) as being anticipated by Parkvall et al. (2002/0080719).

For claim 5, Parkvall et al. discloses a transmitting apparatus comprising: a scheduler **(see figures 10 and 11, box 46 and 66)** that determines a packet destination apparatus **(see paragraph 0041 lines 14-25)** among communicating apparatuses **(see paragraph 0050 lines 2-10)**; and a command detector **(see figures 10 and 11, box 44 and 64)** that detects a command transmitted from the determined

packet destination apparatus **(see paragraph 0055 lines 10-15)**, wherein the scheduler **(see figures 10 and 11, box 46 and 66)** changes the packet destination apparatus **(see paragraph 0045)** when the scheduler receives an instruction to stop the packet transmission from the packet destination apparatus **(see paragraph 0058 lines 18-29)**.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 1 and 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato (5,771,467) in view of Katz et al. (2003/0076787).

For claim 1, Sato discloses a receiving apparatus comprising:

a reception quality measurer **(see column 3 lines 40-43)** that measures a reception quality of a receiving packet **(see column 2 lines 19-24)**; an error detector **(see column 4 lines 8-10)** that performs error detection processing

upon the receiving packet **(see column 3 lines 10-14)**; a command generator **(see column 2 lines 12-16)** that, according to a determination result by the threshold level determiner and an error detection result by the error detector, generates a command that instructs a communicating apparatus to transmit a new packet, retransmit the packet, stop packet transmission, or resume the packet transmission **(see column 2 lines 9-18)**; and a transmitter that transmits the generated command to the communicating apparatus **(see column 3 lines 26-28)**.

For claim 1, Sato discloses all the subject matter of the claimed invention with the exception of a threshold level determine that provides a first threshold level and a second threshold level. Katz et al from the same or similar fields of endeavor teaches a threshold level determiner **(see column 2 lines 9-12)** that provides a first threshold level and a second threshold level below the first threshold level and determines a scale relationship of the reception quality to each threshold level **(see paragraph 0008 lines 5-22).** Thus it would have been obvious to the person of ordinary skill in the art at the

time of the invention to have a threshold level determine that provides a first threshold level and a second threshold level as taught by Katz et al in the communication network of Sato. A threshold level determine that provides a first threshold level and a second threshold level as taught by Katz et al can be modified/implemented into the communication network of Sato by having more than 1 threshold of Katz et al in communication terminal of Sato. The motivation for using a threshold level determine that provides a first threshold level and a second threshold level as taught by Katz et al in the communication network of Sato being that it improves spectral efficiency and high transfer rates.

For claim 3, Sato discloses the command generator generates a command based on the number of times a same comparison result continues in the threshold level determiner **(see column 4 lines 10-14)**.

For claim 4, Sato discloses the command generator generates a command that instructs to stop the packet transmission when errors are detected a predetermined number of times consecutively in receiving packets **(see column 3 lines 63-64 and column 4 lines 1-6)**.

8. Claim 2 rejected under 35 U.S.C. 103(a) as being unpatentable over Sato and Katz et al. as applied to claim 1 above, and further in view of Faerber (2003/0031143).

For Claim 2, Sato discloses the receiving apparatus comprising:

thereafter generates a command that requests to resume the packet transmission when the reception quality of a packet for another user is greater than the first threshold level,

and generates a command that instructs to stop the packet transmission when the reception quality is below the second threshold level **(see column 3 lines 42-57)**.

For claim 2, Sato and Katz et al. discloses all the subject matter of the claimed invention with the exception of the first threshold level greater than the second threshold level. Faerber from the same or similar fields of endeavor teaches the command generator generates a command that instructs to temporarily suspend the packet transmission when the reception quality is below the first threshold level yet greater than the second threshold level **(see paragraph 0039 lines 3-9)**. Thus it would have been obvious to the person of ordinary skill in the art at the time of the invention to have the first threshold level compared with the second threshold level as taught by Faerber in the communication network of Sato and Katz et al. The first threshold level compared with the second threshold level as taught by Faerber can be modified/implemented into the communication network of Sato and Katz et al. by having more than 1 threshold (see figure 3) of Faerber into the communication terminal of Sato and Katz et al. The motivation for using the first threshold level compared with the second threshold level as taught by Faerber in the communication network of Sato and Katz et al. being that it improves spectral efficiency and high transfer rates.

9. Claim 6 rejected under 35 U.S.C. 103(a) as being unpatentable over Sato in view of Parkvall.

For claim 6, Sato discloses a communication method, wherein:

the receiving apparatus **(see column 3 lines 5-10)** instructs the transmitting apparatus **(see column 3 lines 5-10)** to transmit a new packet, retransmit the packet, stop packet

transmission, or resume the packet transmission based on reception quality of a receiving packet and presence or absence of error **(see column 2 lines 9-18)**; and the transmitting apparatus changes a packet destination when the transmitting apparatus receives an instruction to suspend a packet transmission from the receiving apparatus **(see column 4 lines 20-29)**.

For claim 6, Sato discloses all the subject matter of the claimed invention with the exception of scheduling. Parkvall et al from the same or similar fields of endeavor teaches a transmitting apparatus performs scheduling and transmits a packet to a receiving apparatus **(see paragraph 0057 lines 1-7).** Thus it would have been obvious to the person of ordinary skill in the art at the time of the invention to have a transmitting apparatus performs scheduling and transmits a packet to a receiving apparatus as taught by Parkvall et al in the communication network of Sato. a transmitting apparatus performs scheduling and transmits a packet to a receiving apparatus as taught by Parkvall et al can be modified/implemented into the communication network of Sato by connecting the scheduler (figure 11 box 66) of Parkvall et al to the CPU (figure 1 box 18) of Sato. The motivation for using a transmitting apparatus performs scheduling and transmits a packet to a receiving apparatus as taught by Parkvall et al in the communication network of Sato being that the transmitter will accurately receive and decode messages from the receiver.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hayashi (5,148,431), McCarty JR. et al. (2002/0159553) and

Weerackody et al. (5,689,439) are cited to show a method, which is considered pertinent to the claimed invention..

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Liton Miah whose telephone number is (571)270-3124. The examiner can normally be reached on Monday through Friday 7:30am to 5:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rafael Perez-Gutierrez can be reached on (571)272-7915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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10/1/07